

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	T. Venkat Gopal	)
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Patent No.	:	5,670,347	)
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Issued	:	Sep. 23, 1997	)
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Assignee	:	Genetic Applications, LLC	)
			)
For		Peptide-Mediated Gene Transfer	)

REISSUE APPLICATION DECLARATION

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

I, as a named inventor, declare as follows:

1. I am a citizen of the United States. My residence and post office address are 14624 Boat House Way, North Potomac, MD 20878.
2. I believe that I am an original, first and sole inventor of the subject matter described and claimed in U.S. Patent No. 5,670,347, issued Sep. 23, 1997, and of the subject matter disclosed and claimed in the accompanying reissue application.
3. I have reviewed and understand the contents of the specification of the accompanying reissue application.
4. I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.
5. On information and belief, U.S. Patent No. 5,670,347 is partially inoperable by claiming less than I had a right to claim. Specifically, the insufficiency of the claims resides in the failure to present claims directed to a transfection vector where the transfection vector comprises a synthetic polypeptide linked electrostatically to a DNA structural sequence, forming

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a polypeptide-DNA complex, where the polypeptide is comprised of a nuclear localization signal (NLS) peptide. The new claims presented in the reissue application are directed to this feature, while the original claims of the patent are not.

6. Turning from the unclaimed subject matter at large to a specific reissue claim, the reissue application includes new independent Claim 15. The newly claimed subject matter of Claim 15 is best understood by a comparison to original Claim 1 of the patent. Presented below is a mock claim which illustrates the claim language common to Claims 1 and 15 in plain type, the claim language specific to Claim 1 in bracketed type, and the claim language specific to Claim 15 in underlined type:

A transfection vector comprising a synthetic polypeptide linked electrostatically to a DNA structural sequence, forming a polypeptide-DNA complex, wherein said polypeptide is comprised of [(A) a polymeric chain of basic amino acid residues, (B)] a nuclear localization signal (NLS) peptide [and (C) a hinge region of neutral amino acids that connects said polymeric chain and said NLS peptide].

The above illustration clearly identifies the differences in the claimed subject matter and evidences the difference in scope between original Claim 1 and reissue Claim 15. No original claim has a scope equal to that defined by reissue Claim 15. Support is found throughout the specification, for example, at col. 1, lines 5-10.

7. The reissue application also includes new independent Claim 16. The newly claimed subject matter of Claim 16 is best understood by a comparison to original Claim 1 of the patent. Presented below is a mock claim which illustrates the claim language common to Claims 1 and 16 in plain type, the claim language specific to Claim 1 in bracketed type, and the claim language specific to Claim 16 in underlined type:

A transfection vector [comprising] wherein said transfection vector is purified and comprises a synthetic polypeptide linked electrostatically to a DNA structural sequence, forming a polypeptide-DNA complex, wherein said polypeptide is comprised of [(A) a polymeric chain of basic amino acid residues, (B)] a nuclear localization signal (NLS) peptide [and (C) a hinge region of neutral amino acids that connects said polymeric chain and said NLS peptide].

The above illustration clearly identifies the differences in the claimed subject matter and evidences the difference in scope between original Claim 1 and reissue Claim 16. No original

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claim has a scope equal to that defined by reissue Claim 16. Support is found throughout the specification, for example, at col. 1, lines 5-10, and Example 1.

8. The reissue application also includes new independent Claim 17. The newly claimed subject matter of Claim 17 is best understood by a comparison to original Claim 1 of the patent. Presented below is a mock claim which illustrates the claim language common to Claims 1 and 17 in plain type, the claim language specific to Claim 1 in bracketed type, and the claim language specific to Claim 17 in underlined type:

A transfection vector [comprising] in a kit wherein said transfection vector comprises a synthetic polypeptide linked electrostatically to a DNA structural sequence, forming a polypeptide-DNA complex, wherein said polypeptide is comprised of [(A) a polymeric chain of basic amino acid residues, (B)] a nuclear localization signal (NLS) peptide [and (C) a hinge region of neutral amino acids that connects said polymeric chain and said NLS peptide].

The above illustration clearly identifies the differences in the claimed subject matter and evidences the difference in scope between original Claim 1 and reissue Claim 17. No original claim has a scope equal to that defined by reissue Claim 17. Support is found throughout the specification, for example, at col. 1, lines 5-10, and Example 1.

9. The reissue application also includes new independent Claim 18. The newly claimed subject matter of Claim 18 is best understood by a comparison to original Claim 1 of the patent. Presented below is a mock claim which illustrates the claim language common to Claims 1 and 18 in plain type, the claim language specific to Claim 1 in bracketed type, and the claim language specific to Claim 18 in underlined type:

A transfection vector [comprising] outside a cell wherein said transfection vector comprises a synthetic polypeptide linked electrostatically to a DNA structural sequence, forming a polypeptide-DNA complex, wherein said polypeptide is comprised of [(A) a polymeric chain of basic amino acid residues, (B)] a nuclear localization signal (NLS) peptide [and (C) a hinge region of neutral amino acids that connects said polymeric chain and said NLS peptide].

The above illustration clearly identifies the differences in the claimed subject matter and evidences the difference in scope between original Claim 1 and reissue Claim 18. No original claim has a scope equal to that defined by reissue Claim 18. Support is found throughout the specification, for example, at col. 1, lines 5-10, and Example 1.

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10. The reissue application also includes new independent Claim 19. The newly claimed subject matter of Claim 19 is best understood by a comparison to original Claim 14 of the patent. Presented below is a mock claim which illustrates the claim language common to Claims 14 and 19 in plain type, the claim language specific to Claim 14 in bracketed type, and the claim language specific to Claim 19 in underlined type:

A process for producing a transformed mammalian cell line, comprising the step of transfecting a mammalian cell with a vector according to [claim 1, wherein said DNA structural sequence comprises an oncogene] any of Claims 15-18.

The above illustration clearly identifies the differences in the claimed subject matter and evidences the difference in scope between original Claim 14 and reissue Claim 19. No original claim has a scope equal to that defined by reissue Claim 19. Support is found throughout the specification, for example, at col. 1, lines 5-10, and Example 1.

11. The reissue application also includes new independent Claim 20. The newly claimed subject matter of Claim 20 is best understood by a comparison to original Claim 14 of the patent. Presented below is a mock claim which illustrates the claim language common to Claims 14 and 20 in plain type, the claim language specific to Claim 14 in bracketed type, and the claim language specific to Claim 20 in underlined type:

A process for producing a [transformed mammalian cell line] transfected eukaryotic cell, comprising the step of transfecting a [mammalian] eukaryotic cell with a vector according to [claim 1, wherein said DNA structural sequence comprises an oncogene] any of Claims 15-18.

The above illustration clearly identifies the differences in the claimed subject matter and evidences the difference in scope between original Claim 14 and reissue Claim 20. No original claim has a scope equal to that defined by reissue Claim 20. Support is found throughout the specification, for example, at col. 1, lines 5-10, and Example 1, and col. 4, lines 10-12.

12. On information and belief, all errors being corrected in the reissue application arose without any deceptive intent on the part of the Applicant.

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13. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful, false statements may jeopardize the validity of the application or patent issuing therefrom.

Dated: 9/21/97

By: T. Venkat Gopal  
T. Venkat Gopal

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